

Tweedy is a narrow improvement patent to a system that sends still pictures and accompanying program sound from a central repository to remote terminals at the specific request from such terminal (col 1 ln 33-col 2 ln 26; terminal user request col 1 lns 39-40, 43, 48, 55, 63-64, etc.; central repository sending pictures and sound col 1 lns 39, 57-58, 66-67; col 2 lns 3-26).

Tweedy is an improvement to this system that it allows a particular user to initiate the transfer of still videos and accompanying audio on the system on such user's request (col 3 ln 4; col 4 lns 43-45; col 7 lns 8-15; col 10 lns 11, 19, 29-30, 35). The key to the operation of Tweedy is that, at a specific terminal user's request, the server subsystem searches a database to identify the specific information frames that will satisfy the subscriber's request (col 10 lns 17-19). The requested frames are then transmitted in sequence to the terminal from the video subsystem (col 10 lns 31-34). This information includes both audio and video (both sent as single video frames) (col 7 lns 15-38). The specific audio and displayed still frame are both fed into buffer memories in order to insure correlation to the audio and video at the particular terminal (col 3 lns 15-26, 58-60; col 7 lns 39-42; col 8 lns 30-36). Tweedy thus teaches of an improvement to the preexisting limited system by allowing the

transmittal of specific still video with accompanying continuous audio to a specific terminal on that user's specific request for the information (col 2 lns 35-38). This allows 100 active users to share a single channel (col 5 lns 44-49).

Tweedy is thus an improvement patent in respect to sending still pictures with accompanying sound in a system responding to user's requests. The essential difference to the Tweedy prior art is that, on a specific user's request, a still video frame with accompanying audio is transmitted in a multiplex fashion along a single channel, thus allowing interactive services wherein many users can initiate and interact with the programs or services at different times instead of at a single time (col 2 lns 22-26).

With this knowledge of the narrowness of Tweedy, it is believed that the claims differentiate over this reference. For example:

Claim 1 calls for "at least one of the multiple programs being delivered without a user's specific request". The improvement in Tweedy over the Tweedy prior art (for example NHK system) is that Tweedy sends still selected video and correlated audio frames to a specific terminal at a specific user's request (col 3 ln 3; col 4 ln 45; col 10 lns 11, 32, 35). This is the very antithesis of this recitation in claim 1.

An additional example is that claim 1 calls for "means for the user to select a particular program from the data storage medium at the user's location". In Tweedy, all of the audio and video information is located at the server subsystem, to be sent therefrom only at a specific terminal's request. (The terminal user has no control over the audio and video buffer memories which exist at the terminal. These memories merely allow for the correlation between the continuous audio and the still video sent from such server (col 7 lns 39-42; col 8 lns 29-36).) Tweedy thus does not have the data storage medium at the user's location or the selection recited in claim 1.

The other claims similarly distinguish over Tweedy. For example, independent claim 10 recites "means to the particular user's location to selectively access ... the programs at that location respectively". Tweedy has no control at the terminal for selective accessing of stored programs located at the terminal's location. Tweedy instead specifically accesses audio and video material stored at the central server.

A further example in respect to claim 14, this claim calls for "override means to automatically override previously stored material including at least some material which has not been previously accessed ... which includes at least one

priority other than updating of existing materials". Tweedy does not have any memory at the user's terminal (except for the buffers that allow for the correlation between the still video and continuous audio). In addition, in Tweedy there is no teaching of anything being overwritten "which has not been previously accessed".

Claim 19 is similar.

In respect to claim 28, this claim calls for "means to record at least part of a given program ... in the storage area ... (together with) means to record programs at the same time as said reproduction ...". Tweedy does not have a means to select reproduction from a storage area at the same time as programs are being recorded.

In respect to claim 28, there is no teaching in Tweedy of a "data manager" being located at "a remote location", let alone the operation thereof. In contrast, in Tweedy all of the access materials are located at the server subsystem, with such information being specifically requested by a particular terminal user for subsequent transmission.

In respect to independent claim 39, this claim begins with programs transmitted "to a particular user at a given location" with "means to process the program identification data at the given location" to process such program identification data for selective access. As previously set

forth, in Tweedy all of the processing occurs at the server subsystem and not at the user's terminal.

In respect to claim 40, this claim calls for a means to store a multiplicity of programs including "an optical storage medium". There is no reason to include an optical storage at the terminals 12 in that this would defeat the entire improvements system of Tweedy wherein all of the programs are located at the server subsystem to be sent to such terminal at a specific user's request.

In respect to claim 43, this claim calls for program data storage to record "at least selected ones of the delivered programs". There is no teaching in Tweedy of retrieving "selective ones of the delivered program" from a storage at the terminal using a listing. In contrast, the buffer memory of Tweedy passes everything through which has been requested by the terminal user as sent along the CATV distribution subsystem at the user's request.

Claims 48 and 56 are similar.

In view of the Tweedy reference's narrow improvement to allow a terminal user to specifically request and be sent still video with corresponding time burst continuous audio along a CATV system in a multiplex fashion, it is believed that the differences in operation are significant that the reference does not anticipate the claims as set forth above. Applicant,

therefore, respectfully requests the examiner's reconsideration of the Tweedy based rejections.

In respect to the rejections under 35 USC 102 as being anticipated by Ulrich U.S. Patent 5,583,937, again applicant respectfully requests the examiner's reconsideration of this series of rejections.

Ulrich relates to providing a single video program on multiple channels in order to show the same program on a time offset basis (abstract lns 7-8; fig 3; col 2 lns 26-31, etc.). The staggering of a single program on multiple channels allows subscribers to have access to the desired video, said to be "immediately on demand" (col 4 lns 2-5; col 8 lns 29-33). When any particular channel is not supplied with program video, a promotional channel is automatically exhibited (col 5 lns 25-28; figs 3, 4; col 8 lns 14-33). The subscribers can view the unscrambled promotional material prior to the showing of each program (col 5 lns 55-62). The subscriber can then select to view a particular program based on such promotional material (col 6 lns 23-30). Records of the ordering are kept by the converter to be subsequently transmitted to the downstream controller (col 6 lns 35-57). Alternately, this can be accomplished by telephone (col 6 lns 62-64). Necessary bills are then sent out (col 7 lns 27-35).

The key to the Ulrich system is that the interval between sending of a particular program over a multiplicity of channels is done at an interval sufficiently short that the subscribers may make impulse decisions relative to the programs that they wish to view (col 8 lns 25-33). It is noted the only recording of a program which occurs at the subscriber's location is the recorder 28, a conventional single channel VCR (col 7 lns 38-40), immediately upstream of the conventional TV receiver 29.

The claimed invention is also believed to be distinct from Ulrich.

Claim 6 calls for "means at the given user location to record program identification data for multiple programs" and "means at the same given user location to process the recorded program identification data to allow selective access to at least one of the multiple programs". This recitation refers to the use of a data manager including a program data processor at the user location to select programs (pg 7 lns 3-7, 12-14; pg 12 lns 21-24, etc.). In contrast, in Ulrich the promotional video, etc. are located at the server (fig 2; col 4 lns 50-63; col 5 lns 4-9; col 7 lns 64-67, etc.).

An additional example, in respect to claim 21, this claim calls for "means to alter the frequency of the frequency related information to automatically compensate for the

different on-time presentation ...". This reference refers to the ability of the invention to view programs at an accelerated (or decelerated) speed (pg 3 lns 2-3, 6-18). This allows a user to, for example, pause a program and view it without losing any loss of program (pg 22 lns 8-28). In contrast, in Ulrich there is no change in frequency of the particular program. The program is always a continuous length no matter what channel one selects. It is believed that the examiner's suggestion of changing channels can not be said to be included in the meaning of the term "frequency" in that the length of the program transmitted on any particular channel remains unchanged in Ulrich, with the examiner's change in channels mandating the loss or repeat of substantial programming (as disclosed in 30 minute integrals).

Claim 25 calls for "at least one program delivered without a given user's request". In contrast, in Ulrich the subscriber requests the program (col 2 lns 5-7, 11-15, 35-36; col 5 lns 64-66; col 6 lns 23, 31-32; col 8 lns 29-33, etc.).

In respect to claim 29, Ulrich does not have a bypass, let alone a frequency artifact modifier circuit with a bypass therefor.

In respect to claim 43, this claim calls for "said program data storage recording at least selected ones of the delivered programs". Ulrich does not have a program data

storage for recording delivered programs. To the contrary, Ulrich is a pay per view device in which all of the programming is provided in real time from the video server 11 at the central location.

In addition to the above, claim 43 further calls for a user control "selectively retrieving" the delivered program from the program data storage using a listing. There is no access in Ulrich to recorded delivered programs via a user control. The access is entirely of staggered programs from the central video server 11. This is emphasized by the further language of claim 43 which recites "simultaneously recording other selected portions" of the delivered programs as the selected portion is being "retrieved" by said user control. Ulrich does not have this simultaneous record/display feature as set forth in claim 43.

Based on the above, applicant believes that the claims directed under 35 USC 102 as being based on Ulrich should be allowable thereover.

Claims 30 and 39 were rejected based on Ulrich in view of Barrett U.S. Patent 5,287,420.

Claim 30 depends on claim 29. Since claim 29 distinguishes over Ulrich as previously set forth, claim 30 should also differentiate over any combination of Ulrich in view of another reference.

Applicant believes that the reference to claim 39 in this rejection is in error. Claim 39 does not recite "MPEG". Also, the wording of claim 39 discusses Tweedy, a rejection previously discussed.

Claims 13, 30, and 41 were rejected based on Tweedy in view of Barrett. Again, since parent claims 10, 29, and 40 distinguish over Tweedy, claims dependent thereon should also differentiate over any combination of Tweedy in view of another reference.

Favorable action is solicited.

Respectfully submitted,

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## A P P E N D I X

Claim 67. I claim a method for accessing multiple programs delivered in compressed form on one or more delivery channels,

said method including delivering at least one of the multiple programs without a user's specific request,

at least one of said multiple programs including at least some substantive displayable information that may be distinct from a listing of the programs allowing access, storage, and/or retrieval thereof, said method further including:

recording the programs in a data storage medium at the user's location, selecting a particular program from the data storage medium at the user's location and decompressing said particular program for use by the user before or after storage, which use can include displaying of a particular program including at least some of said substantive displayable information.

Claim 68. I claim the method of claim 67 characterized by storing multiple programs delivered on a

schedule over which the user has no control in one storage medium.

Claim 69. I claim the method of claim 67 characterized by storing the programs in a compressed format.

Claim 70. I claim the method of claim 67 characterized by the addition of delivering and storing program information at the user's location and accessing said program information.

Claim 71. I claim the method of claim 70 characterized by the addition of using a data manager means to access the program.

Claim 72. I claim a method for accessing multiple programs delivered in a compressed form on one or more delivery media together with program identification data to a user at a given user location,

at least one of said multiple programs including at least some substantive displayable information that may be distinct from a listing of the program identification data,  
the method including:

recording at the given user location program  
identification data for the multiple programs,  
accessing at the same given user location the  
recorded program identification data for the multiple programs,  
processing at the same given user location the  
recorded program identification data to selectively access to  
at least one of the multiple programs,  
and using said at least one of the multiple programs,  
which use of such programs can include display of the program  
including said at least some substantive displayable  
information.

Claim 73. I claim the method of claim 72  
characterized in that the multiple programs and program  
identification data are delivered contemporaneously and by the  
addition of delaying the programs to allow processing of the  
program identification data.

Claim 74. I claim the method of claim 72  
characterized by the addition of processing the program  
identification data by a data manager means.

Claim 75. I claim the method of claim 72 characterized by the addition of accessing the programs by a data manager means.

Claim 76. I claim an improved method for delivering multiple programs in a compressed form via one or more delivery channels from a site to a particular user's location without the particular user's control,

at least one of said multiple programs including at least some substantive displayable information that may be distinct from a listing of the programs allowing access, storage, and/or retrieval thereof,

said improved method including:

the storing at least certain of the multiple programs in compressed form at the particular user's location and selectively accessing and decompressing the programs at that particular user's location respectively,

said accessing including displaying the programs, which displaying can include the program including said at least some substantive displayable information.

Claim 77. I claim the method of claim 76 characterized in that said storing the programs includes an optical storage medium.

Claim 78. I claim the method of claim 76 characterized in that said storing the programs includes computer memory.

Claim 79. I claim the method of claim 76 characterized by compressing the programs in a MPEG type form and selectively decompressing said MPEG type signals.

15  
Claim 80. I claim an access method having a storage capability with a limited capacity, the improvement including:  
storing materials in the storage having a limited capacity,  
and automatically overwriting previously stored material including at least some material which has not been previously accessed based on determinable criteria developed from a known set of priorities,  
said known set of priorities which includes at least one priority other than updating of existing materials.

Claim 81. I claim the method of claim 80 characterized in that said overwriting includes consideration of available storage.

Claim 82. I claim the method of claim 80 characterized in that said overwriting includes consideration of the time the program was stored.

Claim 83. I claim the method of claim 80 wherein there are multiple users having a priority and characterized in that said overwriting includes consideration of the multiple user's priority.

Claim 84. I claim an access method having a storage capability for programs, the programs subject to an access, storage, and/or retrieval date,

the improvement including:

storing programs in the storage area, and automatically allowing access for storage of programs in previously utilized storage area upon occurrence of a certain event other than the accessing of the stored program in such storage area, with at least one of said programs including at least some of said substantive displayable information.

Claim 85. I claim the access method of claim 84 characterized in that said certain event is the arrival of a certain time subsequent to the time of a particular program's storage.

Claim 86. I claim an access method having an ability to reproduce an accessible program having frequency related information with a certain intended run time of presentation, for a user requiring a different run time of presentation,

the improvement including:

selecting the accessible program from multiple programs and altering the frequency of the frequency related information to automatically compensate for the different run time of presentation and thus the certain run time of presentation of the accessible program to the different run time.

Claim 87. I claim the access method of claim 86 wherein the different run time is determined by the user's interruption of access to the programs.

Claim 88. I claim the access method of claim 87 characterized in that said accessible program would normally terminate at a time certain and

characterized in that said altering the different run time so as to terminate said accessible program at the same time as said time certain.

Claim 89. I claim an access method for multiple programs delivered in compressed form across one or more delivery channels,

the multiple programs include at least one program delivered without a given user's request therefor and a listing which may be separate of the programs allowing access, storage, and/or retrieval thereof,

a program data stream, said program data stream including at least some substantive displayable information,

said access method including:

selecting at the given user's location [to select] a particular program from said program data stream without off location contact using the listing,

recording said selected program in a data storage media,

and decompressing said selected program for displaying, said displaying which can include display of the program including said at least some substantive displayable information.

Claim 90. I claim the method of claim 89 characterized in that program identification data is also delivered for those programs delivered without a given user's request,

the multiple programs and program identification data being delivered substantially contemporaneously and by the addition of delaying the programs to allow processing of the program identification data.

Claim 91. I claim the method of claim 90 characterized by the addition of processing the program identification data by a data manager means.

Claim 92. I claim an access method having a storage area for programs having substantive displayable information, the programs subject to access, storage, and/or retrieval by a listing,

the improvement including:

recording at least part of a given program having substantive displayable information in the storage area,

accessing at least part of said given program having substantive displayable information from the storage area so as to select reproduction thereof and

recording programs having substantive displayable information at the same time as said reproduction which recording can include the remainder of said given program and/or another program in the storage area.

Claim 93. I claim an access method having a decompression circuit and a frequency artifact producing circuit,

the improvement of passing programs through the decompression circuit and then passing them through a frequency artifact modifier circuit,

and selectively bypassing the frequency artifact modifier circuit when the frequency artifact producing circuit is inactive.

Claim 94. I claim the access method of claim 93 characterized in that the decompression decoder is a MPEG type decoder.

Claim 95. I claim the access method of claim 93 characterized in that the artifact modifier circuit is a frequency converter.

Claim 96. I claim an access method having multiple channels of substantive displayable information and access information for delivery of programs to a remote location,  
the method including:  
a data manager,

storing the access information relative to the delivered information including information relative to at least one delivered upcoming program in the memory of a data manager located at said remote location,

and selectively controlling access to the substantive displayable information on the multiple channels for presentation of said programs which can include the display of said at least one delivered upcoming program at said remote location using said data manager.

Claim 97. I claim the access method of claim 96 characterized by the addition of storing the channels of information.

Claim 98. I claim the access method of claim 96 characterized by the addition of program information relative to the multiple channels of information and utilizing such program information in the data manager.

Claim 99. I claim the access method of claim 96 characterized by the addition of other services and accessing said other services by said data manager.

Claim 100. I claim an improved access method for a particular user to access multiple programs delivered in compressed form via one or more delivery channels,

at least one of said multiple programs including at least some substantive displayable information,

said access method including delivery program information separate from said substantive displayable information to the particular user at the given location,

recording multiple programs in a compressed format in a data storage medium at the given location,

accessing by the particular user at the given location said program information and selecting a particular program for presentation at the given location,

and decompressing said particular program for display which can include the display of said at least some substantive displayable information.

Claim 101. I claim the access method of claim 100 characterized by the addition of allowing the user to access the program through the data manager means.

Claim 102. I claim a method having multiple programs transmitted in a compressed form via a transmission media with

program identification data transmitted to a particular user at a given location,

at least one of the programs including at least some substantive displayable information that may be other than the program identification data,

the method including the particular user directly accessing the program identification data at the given location,

delaying the programs to allow processing of the program identification data, processing the program identification data at the given location,

and processing the program identification data and allowing the particular user to selectively access the programs at the given location by a data manager means at the given location, which access can include displaying said at least some substantive displayable information.

Claim 103. I claim an improved method for a multiplicity of programs transmitted in a compressed form on one or more transmission channels,

listing the programs to allow the access, storage, and/or retrieval thereof also being transmitted,

characterized by the addition including:

storing said multiplicity of programs in their compressed form at a given location,  
at least one of said multiplicity of programs including at least some substantive displayable information,  
said storing the programs including an optical storage medium which storage can include said at least some substantive displayable information,  
and selectively accessing a program using the listing and decompressing the program from said means to store the programs at said given location for display.

Claim 104. I claim the access method of claim 103 characterized in that the programs are compressed in a MPEG type form and selectively decompressing said MPEG type signals.

Claim 105. I claim the access method of claim 103 characterized in that there are a number of sets of multiplicity programs that are selectively stored.

Claim 106. I claim an improved access method for substantive displayable programs delivered via one or more delivery channels,

listing the programs allowing the access, storage, and/or retrieval thereof also delivered,

said access method including:  
recording at least selected ones of the delivered programs in a program data storage,  
selectively retrieving said selected ones of the delivered program from said program data storage using the listing by a user control,  
and simultaneously recording other selected portions of the delivered programs in said program data storage as said selected portion of a substantive displayable program is being selectively retrieved by said user control.

Claim 107. I claim the access method of claim 106 characterized in that said selected portion and at least one of said other selected portions are from the same program.

Claim 108. I claim the access method of claim 106 characterized in that said selected portion and at least one of said other selected portions are from different programs.

Claim 109. I claim the access method of claim 107 wherein the program of which said selected portion is a part having a normal presentation conclusion time from initial retrieval

and characterized in that the retrieving said selected portion can be selectively interrupted by the user for a period,

any retrieving of said selected portion can be accelerated to compensate for said period, and said acceleration allowing the program to end at the normal presentation conclusion time.

Claim 110. I claim the access method of claim 109 wherein the program has a frequency and characterized by altering the frequency of any accelerated portion to be substantially equal to the frequency of the program.

Claim 111. I claim an improved access method for programs transmitted via one or more transmission channels, and a listing of the programs allowing the access, storage, and/or retrieval thereof,

said access method including:

passing a data stream via a delivery channel for recording in a data manager located at a particular user's given location,

accessing the data in said data manager using the listing of programs,

recording at least some of one or more of the programs transmitted on the transmission channel without any active selection by the user in a program data storage, at least one of said programs including at least some substantive displayable information, and retrieving selected portions of the programs in said program data storage at said given location via the listing thereof in said data manager, which retrieval can include the display of said at least some substantive displayable information.

Claim 112. I claim the access method of claim 111 characterized in that said data stream includes information of upcoming substantive programs.

Claim 113. I claim the access method of claim 111 characterized by selectively programming said user control to automatically record programs in said program data storage based on the data in said data manager.

Claim 114. I claim the access method of claim 111 characterized by transmitting substantially all of the programs transmitted on a transmission channel without any user's control.

Claim 115. I claim the access method of claim 114 characterized in that the programs are substantially continually transmitted.

Claim 116. I claim the access method of claim 111 characterized in that said program data storage can record programs and the user retrieving a program from said program data storage at the same time.

Claim 117. I claim the access method of claim 111 wherein the program of which said selected portion is a part having a normal presentation conclusion time from initial retrieval and characterized in that retrieving of said selected portion can be selectively suspended by the user for a period of time,

automatically accelerating any retrieving of said selected portion to compensate for said period of time,

and said accelerating allowing the program to end at the normal presentation conclusion time.

Claim 118. I claim the access method of claim 117 wherein the program has an original frequency and characterized by altering the frequency of any accelerated portion by a

frequency shift means to be substantially equal to the original frequency of the program.

Claim 119. I claim an improved access method for programs transmitted on one or more transmission channels, said access system including:

passing a data stream via a delivery channel for access at the direction of a data manager located at a particular user's given location,

allowing access to the data in said data manager by a user control,

recording at least some of one or more of the programs transmitted on the transmission channel in a program data storage without any active selection of individual ones of the specific programs by the user,

at least one of said programs including at least some substantive displayable information other than listing data,

automatically recording selected portions of the transmitted programs in said program data storage at said given location using the listing data in said data manager, which recording can include said at least some substantive displayable information.

Claim 120. I claim the access method of claim 119 characterized by programming said selection to discard programs recorded in said program data storage including programs not yet retrieved according to a known set of priorities.

Claim 121. I claim the access method of claim 120 characterized in that said known set of priorities includes the available recording room in said program data storage.

Claim 122. I claim the access method of claim 120 characterized in that said known set of priorities are ranked in an order of preference.

Claim 123. I claim the access method of claim 119 characterized in that said known set of priorities may be changed from time to time.

Claim 124. I claim the access method of claim 118 characterized by programming said select means to record transmitted programs in said program data storage according to a selection algorithm.

Claim 125. I claim the access method of claim 123 characterized in that said selection algorithm includes one or

more of consideration of the desirability of the program to the user,

the number of users for a program, the time of the program, the relation of the program to programs previously stored, the content of the program, the particular channel for the program and/or the availability of removable storage.

Claim 126. I claim the access method of claim 124 characterized in that said selecting discards or records over previously recorded programs in said program data storage including not retrieved programs according to a known set of priorities.

Claim 127. I claim the access method of claim 126 characterized in that said known set of priorities includes the available recording room in said program data storage.

Claim 128. I claim the access method of claim 126 characterized in that said known set of priorities are ranked in an order of preference.

Claim 129. I claim the access method of claim 126 characterized in that said known set of priorities may be changed from time to time.